

CLAIMS

The invention claimed is

1. A multi-function illuminating display device for a motor vehicle, including a housing, first illuminating means on said housing to display an inverse function engine power indication combined with a brake light signal means, and second illuminating means on said housing to display left and right directional turn signal means combined with left and right park light display means, wherein:
 - a. said housing is equipped with a translucent combination lens and cover over an illuminating surface of said housing;
 - b. the first illuminating means includes a horizontal row of single-color red light emitting diodes, (LEDs);
 - c. the second illuminating means includes a horizontal row of dual-color red/amber LEDs;
 - d. the engine power indication has an associated electronic circuit that enables manual adjustment of electrical parameters that define the high and low end limits of an engine power indication operating range within which the red LEDs operate as the engine power indication;
 - e. the red LEDs when operating as the engine power indication do not operate above the manually adjusted high end limit, or below the manually adjusted low end limit, of the engine power indication operating range, and are sequentially activated and deactivated in inverse proportion to the engine power within the operating range;
 - f. the engine power indication is turned off by the associated electronic circuit during input to the associated electronic circuit of a vehicle brake light signal;
 - g. a vehicle brake light signal input to the associated electronic circuit is displayed by illuminating the horizontal row of red LEDs;
 - h. the engine power indication is turned off by the associated electronic circuit during input to the associated electronic circuit of an electrical signal designating a left or right side vehicle turn;

- i. the engine power indication is turned off by the associated electronic circuit during the time a vehicle speed control system is turned on and a hold speed is selected in use of the vehicle speed control system;
- j. the horizontal row of red LEDs when operating as the engine power indication display decreasing engine power by illuminating center of row LEDs at minimal illumination intensity followed by illumination of corresponding pairs of successive adjacent LEDs at noticeable increasing levels of illumination intensity until left and right end of horizontal row LEDs are illuminated at nominal brake light intensity;
- k. activating the left and a right directional turn signal means comprises illuminating the left half and the right half, respectively, of the horizontal row of dual color red/amber LEDs;
- l. the number of red/amber LEDs that illuminate to indicate a signaled left or right turn progressively increases starting with the center of the horizontal row of red/amber LEDs and progressing toward the end of the horizontal row of red/amber LEDs corresponding to the direction of the signaled turn, all such LEDs then being extinguished before the sequence is repeated;
- m. the horizontal row of red/amber LEDs when operating as the turn signal means are illuminated at a nominal brake light intensity; and
- n. in the absence of a left or right directional turn signal indication, the horizontal row of red/amber LEDs will illuminate in a red color at a nominal park light intensity.